

Appl. No. 09/823,459  
Amendment Dated 8/16/2005  
Reply to Office Action of June 8, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method to perform routing in a network, comprising:  
receiving a packet at a network node configured to perform basic routing services  
for said packet;  
determining whether said packet requires advanced routing services not included  
in said basic routing services; and  
sending said packet to a hosted advanced routing server configured to perform  
said advanced routing services.
2. (Original) The method of claim 1, wherein said sending is performed over a  
virtual connection.
3. (Original) The method of claim 2, wherein said virtual connection is secure.
4. (Canceled)
5. (Currently Amended) A method to perform routing in a network, comprising:  
receiving a packet at a network node configured to perform basic routing services

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for said packet;

determining whether said packet requires advanced routing services not included in said basic routing services, with said advanced routing services comprising dynamic routing;

sending a request for advanced routing information to a hosted advanced routing server configured to perform said advanced routing services;

receiving said advanced routing information; and

routing said packet using said advanced routing information.

6. (Original) The method of claim 5, wherein said sending and receiving are performed over a virtual connection.

7. (Original) The method of claim 6, wherein said virtual connection is secure.

8. (Currently Amended) A method to perform routing in a network, comprising:  
receiving a packet and a request for advanced routing information at a hosted advanced routing server from an intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services not included in said basic routing services;

determining a packet classification for said packet;

retrieving advanced routing information corresponding to said packet classification; and

routing said packet using said advanced routing information.

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9. (Original) The method of claim 8, wherein said packet is received and routed using a virtual connection.
10. (Original) The method of claim 8, wherein said virtual connection is secure.
11. (Original) The method of claim 8, wherein said retrieving comprises retrieving said routing information from a routing table.
12. (Currently Amended) A method to perform routing in a network, comprising:  
receiving a request for advanced routing information for a packet at a hosted advanced routing server from an intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services not included in said basic routing services;  
determining a packet classification for said packet;  
retrieving advanced routing information corresponding to said packet classification; and  
sending said advanced routing information to said intermediate node.
13. (Original) The method of claim 12, wherein said packet is received and routed using a virtual connection.
14. (Original) The method of claim 13, wherein said virtual connection is secure.

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15. (Original) The method of claim 12, wherein said retrieving comprises retrieving said routing information from a routing table.

16. (Currently Amended) A method to perform advanced network services in a network, comprising:

receiving a request for an advanced network service for a packet at a hosted advanced routing server from an intermediate node over a first virtual connection, said intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services not included in said basic routing services;

performing said advanced network service for said packet; and  
sending said packet over a second virtual connection.

17. (Original) The method of claim 16, wherein said first and second virtual connections are secure.

18. (Currently Amended) An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in performing routing in a network by receiving a packet at a network node configured to perform basic routing services for said packet, determining whether said packet requires advanced routing services not included in said basic routing services,

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and sending said packet to a hosted advanced routing server configured to perform said advanced routing services.

19. (Original) The article of claim 18, wherein the stored instructions, when executed by a processor, further result in sending said packet over a secure virtual connection.

20. (Original) The article of claim 18, wherein the stored instructions, when executed by a processor, further result in receiving said packet with advanced routing information, and sending said packet to another network node using said advanced routing information.

21. (Currently Amended) An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in performing routing in a network by receiving a packet at a network node configured to perform basic routing services for said packet, determining whether said packet requires advanced routing services not included in said basic routing services, with said advanced routing services comprising dynamic routing, sending a request for advanced routing information to a hosted advanced routing server configured to perform said advanced routing services, receiving said advanced routing information, and routing said packet using said advanced routing information.

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22. (Original) The article of claim 21, wherein the stored instructions, when executed by a processor, further result in sending and receiving said request and said advanced routing information, respectively, over a secure virtual connection.

23. (Currently Amended) An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in performing routing in a network by receiving a packet and a request for advanced routing information at a hosted advanced routing server from an intermediate node configured to perform basic routing services for said packet, said hosted advanced routing server configured to perform advanced routing services not included in said basic routing services, determining a packet classification for said packet, retrieving advanced routing information corresponding to said packet classification, and routing said packet using said advanced routing information.

24. (Original) The article of claim 23, wherein the stored instructions, when executed by a processor, further result in receiving and routing over a secure virtual connection.

25. (Currently Amended) A method to perform routing in a network, comprising:

receiving a packet at a network node configured to perform routing services for said packet;

determining whether said packet requires advanced network services not included in said routing services; and

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sending said packet to an advanced network services provider configured to perform said advanced routing services.

26. (Original) The method of claim 25, wherein said sending is performed over a secure virtual connection.

27. (Currently Amended) An article comprising:

a storage medium;

said storage medium including stored instructions that, when executed by a processor, result in performing advanced network services in a network by receiving a request for an advanced network service for a packet over a first virtual connection from an intermediate node ~~over a first virtual connection~~ configured to perform routing services for said packet, performing said advanced network service for said packet, and sending said packet over a second virtual connection.

28. (Original) The article of claim 27, wherein the stored instructions, when executed by a processor, further result in receiving and sending over a secure virtual connection.

29. (Currently Amended) A system, comprising:

a communication medium;

a network node configured to perform basic routing services to connect to said communication medium, said network node to receive a packet and determine whether

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said packet requires advanced routing services or advanced network services not included  
in said basic routing services; and

a hosted advanced routing server to connect to said communication medium, said  
hosted advanced routing server to provide said advanced routing services or advanced  
network services for said packet.

30. (Previously Presented) The system of claim 29, wherein said network node  
determines whether said packet requires said advanced routing services or advanced  
network services, said network node to send said packet and a request for such services  
over said communication medium.

31. (Previously Presented) The system of claim 30, wherein said hosted advanced  
routing server receives said packet and request, and processes said packet in accordance  
with said request.

32. (Previously Presented) The system of claim 29, wherein said network node  
determines whether said packet requires said advanced routing services or advanced  
network services, sends a request for such services over said communication medium,  
receives information to perform such services from said hosted advanced routing server,  
and processes said packet using said information.



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33. (Previously Presented) The system of claim 29, wherein said network node establishes a virtual connection to said hosted advanced routing server over said communication medium.

34. (Previously Presented) The system of claim 33, wherein said virtual connection comprises a secure virtual connection.

35-38. (Canceled)

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